MONROE CITY COUNCIL
Transportation/Planning, Public Works, Parks & Recreation and Public Safety Committee Meeting

Tuesday, August 28, 2018, 6 P.M.

Snohomish Fire District No. 7
Station No. 31; Training Room
163 Village Court, Monroe, WA 98272

2018 Committee
Councilmembers
Ed Davis
Jim Kamp
Jeff Rasmussen

AGENDA

I. Call to Order

II. Approval Minutes (July 24, 2018) **[Page 2]**

III. Unfinished Business

A. Crosswalk Policy (Public Works) **[Page 4]**

IV. New Business

V. Other

VI. Next Committee Meeting (September 25, 2018)

VII. Adjournment

MONROE CITY COUNCIL
Transportation/Planning, Public Works, Parks & Recreation and Public Safety Committee Meeting
Tuesday, July 24, 2018, 6 P.M.
Monroe City Hall

2018 Committee
Councilmembers
Ed Davis
Jim Kamp
Jeff Rasmussen

MINUTES

I. Call to Order

A regular meeting of the City of Monroe Transportation/Planning, Public Works, Parks & Recreation, and Public Safety (P4) Committee was held on July 24, 2018, at Monroe City Hall. Councilmember Rasmussen called the meeting to order at 6:02 p.m.

Council Present: Jim Kamp and Jeff Rasmussen
Staff Present: Elizabeth Adkisson, City Clerk; Brad Feilberg, Public Works Director; Becky Hasart, Finance Director; and Jakeh Roberts, Public Works Maintenance & Operations Manager
Citizens Present: Heather Rousey

II. Approval of Minutes (April 24, 2018)

Councilmember Kamp moved to approve the Committee Meeting Minutes of April 24, 2018, as presented; the motion was seconded by Councilmember Rasmussen. Motion carried (2-0).

III. Unfinished Business - NONE

IV. New Business

A. Crosswalk Policy

Mr. Feilberg and Mr. Roberts provided information on crosswalk policies; including: state law (a crosswalk, whether mark or no, exists at all roadway intersections); the City's current unwritten policy (to mark crosswalks at signalized intersections, mid-block crossings, and Main Street between Ferry Avenue and Madison Street); and the locations of crosswalks in Monroe and which are marked.

Discussion ensued regarding recent/past requests for marked crosswalks, research related to best locations for marked crosswalks (criteria), related costs (installation and maintenance) and liabilities, policies of comparable cities, and use of flags. The Committee requested this matter be brought back for further discussion at the August committee meeting; to include information/data on complaints, liability, and policies from comparable cities.

B. Complete Streets

Mr. Feilberg provided information on the Washington State Legislature Complete Streets Award Program; proposed policies to plan, design, operate, and maintain City streets while considering all transportation users and modes; related grant opportunities; and proposed complete streets ordinance.

Discussion ensued regarding required elements already included in the 2015-2035 Comprehensive Land Use Plan (Transportation Element); grant process and cycles (2020 next); and proposed adoption of a complete streets ordinance. The Committee recommended a draft complete streets ordinance be prepared and brought before the full Council for their consideration.

C. Downtown Art

Ms. Hasart provided information on the 2018 downtown art selection process; including: Public Art Policy (2016); 2018 Call for Sculptors, proposals received and reviewed; Art Selection Committee's recommendation (defer selection to 2019 and carry over allocated budget); and alternatives.

Discussion ensued regarding proposals received; the Art Selection Committee's recommendation; deferring selection to 2019; allocating an appropriately-sized budget for 2019 (considering cost of materials, size, and level of artistry); and the 2019 call for sculptors timeline. The Committee recommended appropriating twenty thousand dollars in the 2019 budget for art; and looking into the best time to distribute the call for sculptors/request for proposals in 2019 (possibly earlier in the year).

D. Public Defense RFP

City Clerk Adkisson provided an update on the request for proposals process and timeline for public defense; including: RFP issuance, interviews/panel selection, and potential 2019 budget impacts.

V. Other -- NONE.

VI. Next Committee Meeting (August 28, 2018)

VII. Adjournment

Chairperson Rasmussen noted, with no objection, the July 24, 2018, City of Monroe Transportation/Planning, Public Works, Parks & Recreation and Public Safety (P4) Committee Meeting was adjourned. No objections were noted.

The Committee Meeting adjourned at 6:57 p.m.

P4 Committee

SUBJECT:	*Discussion: Crosswalk Policy*

DATE:	DEPT:	CONTACT:	PRESENTER:	ITEM:
08/28/2018	Public Works	Brad Feilberg	Brad Feilberg	**Unfinished Business A.**

Discussion: 07/24/2018
Attachments:
1. Crosswalk Map
2. Recommendations
3. Other Cities Policies table
4. Manual on Uniform Traffic Control Devices excerpt

REQUESTED ACTION: Discussion and recommendation regarding the preparation of a policy formalizing current practice for council consideration.

DESCRIPTION/BACKGROUND

By state law (RCW 46.04.160, see below) a crosswalk, whether mark or no, exists at all roadway intersections. Crosswalks can also be established at other locations by placing markings on the road surface. The attached map show the locations of crosswalks in Monroe and which are marked.

The City's current unwritten policy is to mark crosswalks at the following locations:

- Signalized intersections
- Mid-block crossings
- Main Street between Ferry Avenue and Madison Street

The latest crosswalk research shows that the presence or absence of crosswalk markings does not affect pedestrian safety on roadways with less than four lanes or speeds of under forty mph. Once you get four or more lanes or over forty mph marked crosswalks without additional treatments may be less safe for pedestrians.

Table 11 from *Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations Final Report and Recommended Guidelines* by the Federal Highway Administration (Attachment 2 https://www.fhwa.dot.gov/publications/research/safety/04100/04100.pdf) summarizes these findings.

The City occasionally receives requests to mark crosswalks and it would be appropriate to have policy by which to evaluate the requests. The City's electronic feedback management system lists eight requests for crosswalk striping in 2017 and 2018.

As requested by the Committee we contacted other jurisdictions regarding their crosswalk policy (Attachment 3). Attachment 4 contains a excerpt from the Manual on Uniform Traffic Control Devices for Streets and Highways referenced by several cities.

FISCAL IMPACTS

The average cost to mark a crosswalk is approximately $3,000.

TIME CONSTRAINTS

N/A

ALTERNATIVES TO REQUESTED ACTION

Possible alternatives for discussion:

- Mark all crosswalks.
- Mark crosswalk on arterials, collectors, and signalized intersections.
- Establish width, speed, volume, destination criteria for crosswalk markings.

RCW 46.04.160 Crosswalk.

"Crosswalk" means the portion of the roadway between the intersection area and a prolongation or connection of the farthest sidewalk line or in the event there are no sidewalks then between the intersection area and a line ten feet therefrom, except as modified by a marked crosswalk.

RCW 46.04.290 Marked crosswalk.

"Marked crosswalk" means any portion of a roadway distinctly indicated for pedestrian crossing by lines or other markings on the surface thereof.

RCW 46.04.220 Intersection area.

(1) "Intersection area" means the area embraced within the prolongation or connection of the lateral curb lines, or, if none then the lateral boundary lines of the roadways of two or more highways which join one another at, or approximately at, right angles, or the area within which vehicles traveling upon different highways joining at any other angle may come in conflict.

(2) Where a highway includes two roadways thirty feet or more apart, then every crossing of each roadway of such divided highway by an intersecting highway shall be regarded as a separate intersection. In the event such intersecting highway also includes two roadways thirty feet or more apart, then every crossing of two roadways of such highways shall be regarded as a separate intersection.

(3) The junction of an alley with a street or highway shall not constitute an intersection.

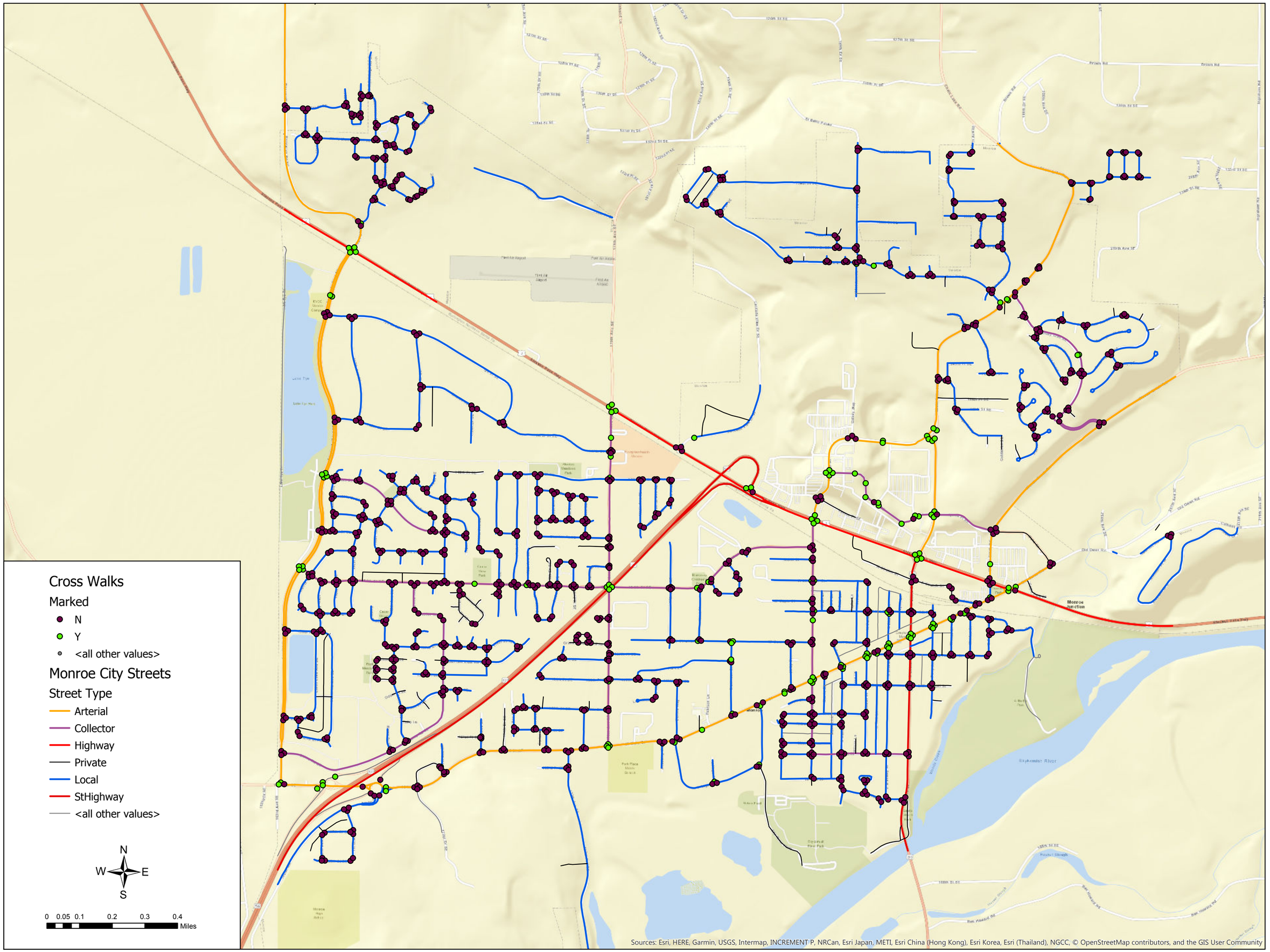

Cross Walks
Marked
N
Y
<all other values>
Monroe City Streets
Street Type
Arterial
Collector
Highway
Private
Local
StHighway
<all other values>
N
W
E
S
0 0.05 0.1 0.2 0.3 0.4
Miles
Monroe Junction
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

Table 11. Recommendations for installing marked crosswalks and other needed pedestrian improvements at uncontrolled locations.*

Roadway Type (Number of Travel Lanes and Median Type)	Vehicle ADT ≤ 9,000			Vehicle ADT >9,000 to 12,000			Vehicle ADT >12,000-15,000			Vehicle ADT > 15,000		
	Speed Limit**											
	≤ 48.3 km/h (30 mi/h)	56.4 km/h (35 mi/h)	64.4 km/h (40 mi/h)	≤ 48.3 km/h (30 mi/h)	56.4 km/h (35 mi/h)	64.4 km/h (40 mi/h)	≤ 48.3 km/h (30 mi/h)	56.4 km/h (35 mi/h)	64.4 km/h (40 mi/h)	≤ 48.3 km/h (30 mi/h)	56.4 km/h (35 mi/h)	64.4 km/h (40 mi/h)
Two lanes	C	C	P	C	C	P	C	C	N	C	P	N
Three lanes	C	C	P	C	P	P	P	P	N	P	N	N
Multilane (four or more lanes) with raised median***	C	C	P	C	P	N	P	P	N	N	N	N
Multilane (four or more lanes) without raised median	C	P	N	P	P	N	N	N	N	N	N	N

* These guidelines include intersection and midblock locations with no traffic signals or stop signs on the approach to the crossing. They do not apply to school crossings. A two-way center turn lane is not considered a median. Crosswalks should not be installed at locations that could present an increased safety risk to pedestrians, such as where there is poor sight distance, complex or confusing designs, a substantial volume of heavy trucks, or other dangers, without first providing adequate design features and/or traffic control devices. Adding crosswalks alone will not make crossings safer, nor will they necessarily result in more vehicles stopping for pedestrians. Whether or not marked crosswalks are installed, it is important to consider other pedestrian facility enhancements (e.g., raised median, traffic signal, roadway narrowing, enhanced overhead lighting, traffic-calming measures, curb extensions), as needed, to improve the safety of the crossing. These are general recommendations; good engineering judgment should be used in individual cases for deciding where to install crosswalks.

** Where the speed limit exceeds 64.4 km/h (40 mi/h), marked crosswalks alone should not be used at unsignalized locations.

*** The raised median or crossing island must be at least 1.2 m (4 ft) wide and 1.8 m (6 ft) long to serve adequately as a refuge area for pedestrians, in accordance with MUTCD and American Association of State Highway and Transportation Officials (AASHTO) guidelines.

C = Candidate sites for marked crosswalks . Marked crosswalks must be installed carefully and selectively. Before installing new marked crosswalks, an engineering study is needed to determine whether the location is suitable for a marked crosswalk. For an engineering study, a site review may be sufficient at some locations, while a more indepth study of pedestrian volume, vehicle speed, sight distance, vehicle mix, and other factors may be needed at other sites. It is recommended that a minimum utilization of 20 pedestrian crossings per peak hour (or 15 or more elderly and/or child pedestrians) be confirmed at a location before placing a high priority on the installation of a marked crosswalk alone.

P = Possible increase in pedestrian crash risk may occur if crosswalks are added without other pedestrian facility enhancements. These locations should be closely monitored and enhanced with other pedestrian crossing improvements, if necessary, before adding a marked crosswalk.

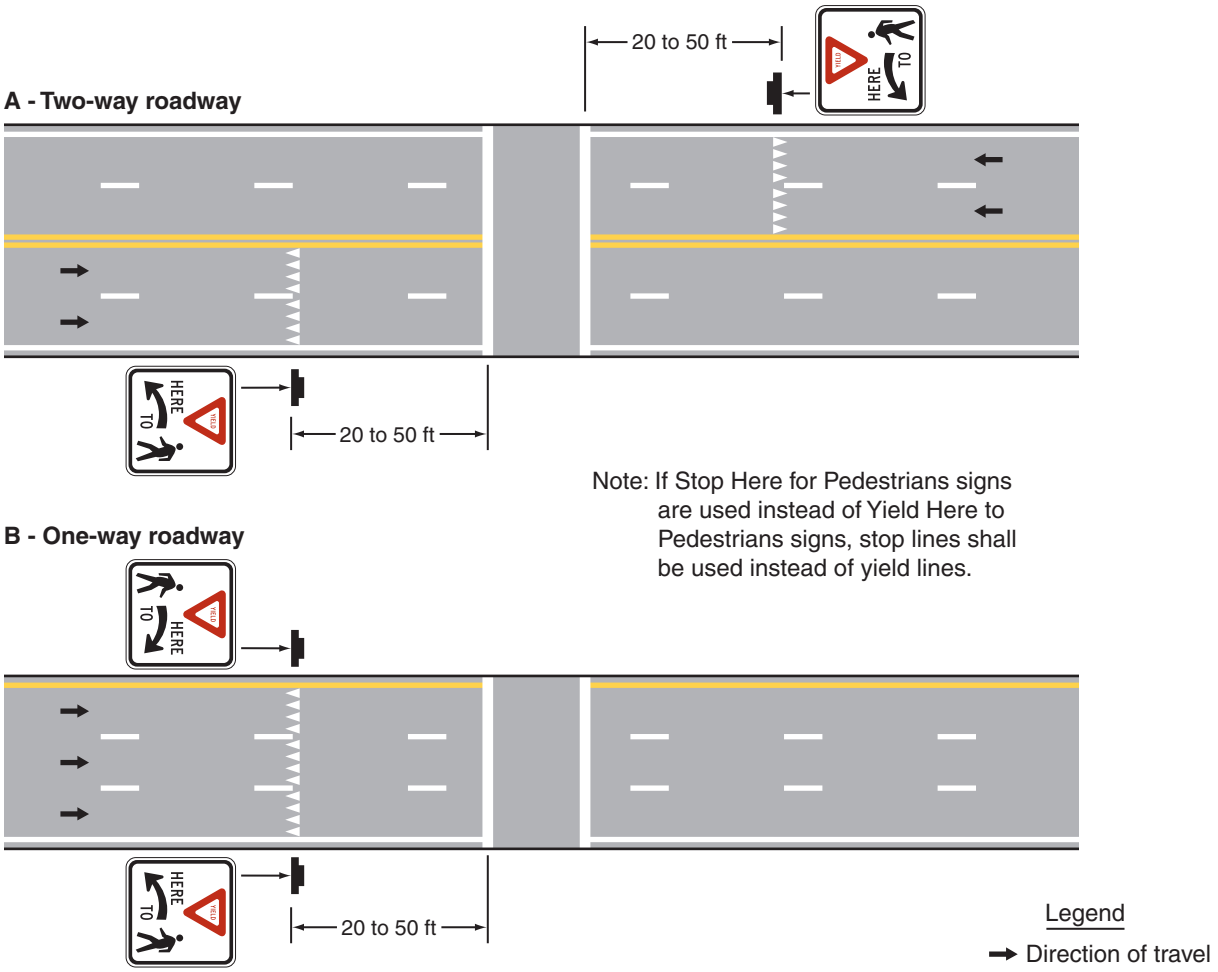
N = Marked crosswalks alone are insufficient, since pedestrian crash risk may be increased by providing marked crosswalks alone. Consider using other treatments, such as traffic-calming treatments, traffic signals with pedestrian signals where warranted, or other substantial crossing improvement to improve crossing safety for pedestrians.

In some situations (e.g., low-speed, two-lane streets in downtown areas), installing a marked crosswalk may help consolidate multiple crossing points. Engineering judgment should be used to install crosswalks at preferred crossing locations (e.g., at a crossing location at a streetlight as opposed to an unlit crossing point nearby). While overuse of marked crossings at uncontrolled locations should be avoided, higher priority should be placed on providing crosswalk markings where pedestrian volume exceeds about 20 per peak hour (or 15 or more elderly pedestrians and/or children per peak hour).

Marked crosswalks and other pedestrian facilities (or lack of facilities) should be routinely monitored to determine what improvements are needed.

City	Contact	Phone #	Notes
Everett	Traffic Engineering Dept.	425-257-8800	LM 8/15/18
Snohomish	Yosh Monzaki	360-282-3161	No written policies. Follow the MUTCD guidelines.
Sultan	Ben McDickin	360-793-2231	No written policies. Follow the MUTCD guidelines.
Duvall	Shaun Tozer	425-788-3434x8046	No written policies. Follow the MUTCD guidelines. Make judgements on a per/case basis.
Woodinville	Rick Roberts	425-877-2294	LM 8/15/18
Marysville (same rules as Lynnwood)	Jessie Perrault		No written policies. No markings unless: 1. It is a signalized intersection 2. The crosswalk is on a designated safe route to school 3. It is a mid-block crosswalk with pedestrian flashers
Stanwood	Trevor Harrison	360-629-9781 #3 cell 425-508-7823	No written policies. Follow the MUTCD guidelines. Repaint everything once a year.

Figure 3B-17. Examples of Yield Lines at Unsignalized Midblock Crosswalks



Section 3B.18 Crosswalk Markings

Support:

01 Crosswalk markings provide guidance for pedestrians who are crossing roadways by defining and delineating paths on approaches to and within signalized intersections, and on approaches to other intersections where traffic stops.

02 In conjunction with signs and other measures, crosswalk markings help to alert road users of a designated pedestrian crossing point across roadways at locations that are not controlled by traffic control signals or STOP or YIELD signs.

03 At non-intersection locations, crosswalk markings legally establish the crosswalk.

Standard:

04 **When crosswalk lines are used, they shall consist of solid white lines that mark the crosswalk. They shall not be less than 6 inches or greater than 24 inches in width.**

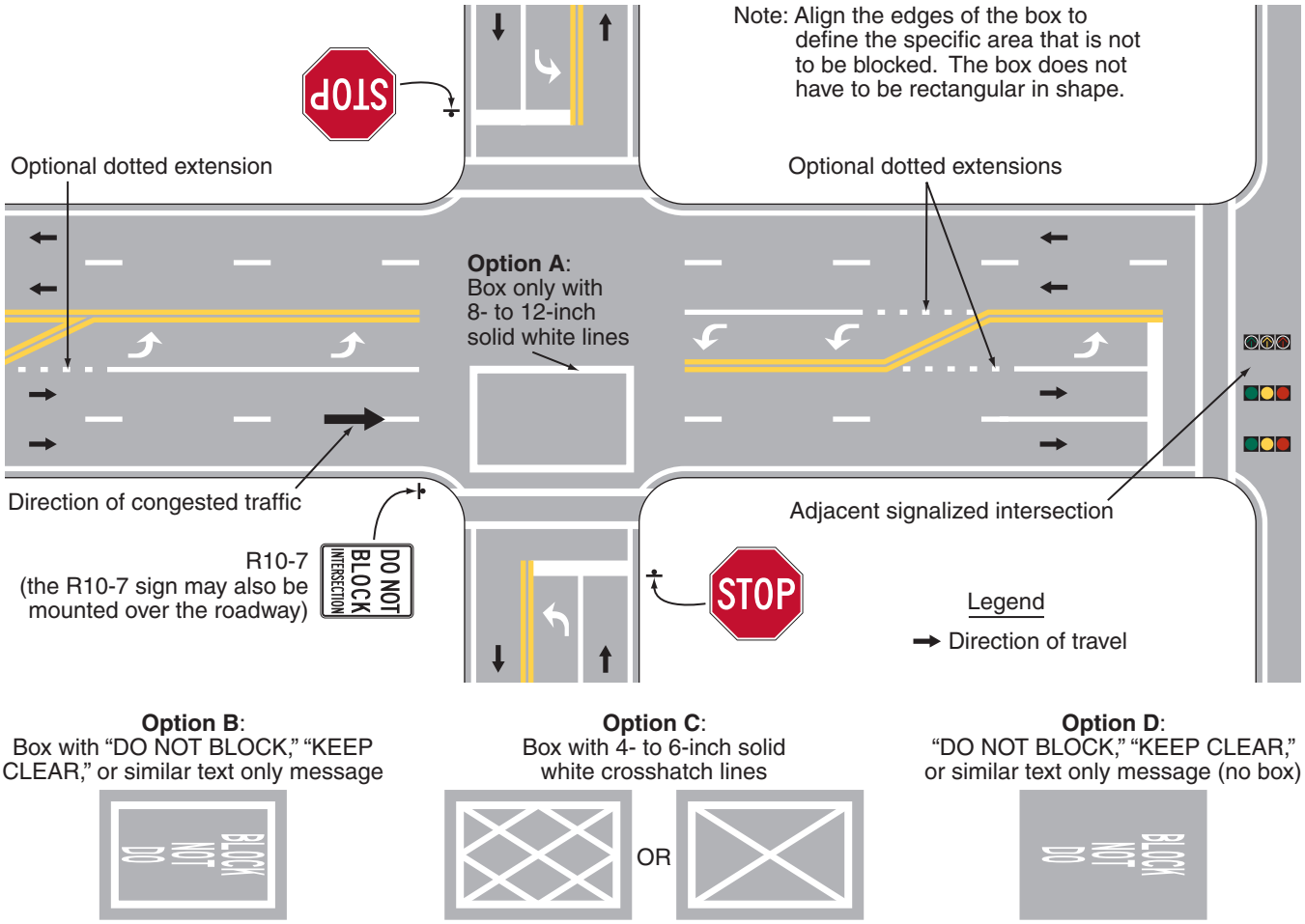
Guidance:

05 *If transverse lines are used to mark a crosswalk, the gap between the lines should not be less than 6 feet. If diagonal or longitudinal lines are used without transverse lines to mark a crosswalk, the crosswalk should be not less than 6 feet wide.*

06 *Crosswalk lines, if used on both sides of the crosswalk, should extend across the full width of pavement or to the edge of the intersecting crosswalk to discourage diagonal walking between crosswalks (see Figures 3B-17 and 3B-19).*

07 *At locations controlled by traffic control signals or on approaches controlled by STOP or YIELD signs, crosswalk lines should be installed where engineering judgment indicates they are needed to direct pedestrians to the proper crossing path(s).*

Figure 3B-18. Do Not Block Intersection Markings



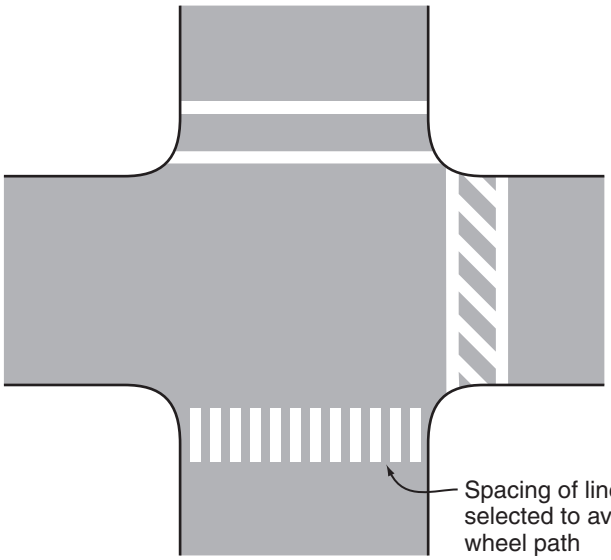
08 *Crosswalk lines should not be used indiscriminately. An engineering study should be performed before a marked crosswalk is installed at a location away from a traffic control signal or an approach controlled by a STOP or YIELD sign. The engineering study should consider the number of lanes, the presence of a median, the distance from adjacent signalized intersections, the pedestrian volumes and delays, the average daily traffic (ADT), the posted or statutory speed limit or 85th-percentile speed, the geometry of the location, the possible consolidation of multiple crossing points, the availability of street lighting, and other appropriate factors.*

09 *New marked crosswalks alone, without other measures designed to reduce traffic speeds, shorten crossing distances, enhance driver awareness of the crossing, and/or provide active warning of pedestrian presence, should not be installed across uncontrolled roadways where the speed limit exceeds 40 mph and either:*

A. The roadway has four or more lanes of travel without a raised median or pedestrian refuge island and an ADT of 12,000 vehicles per day or greater; or

B. The roadway has four or more lanes of travel with a raised median or pedestrian refuge island and an ADT of 15,000 vehicles per day or greater.

Figure 3B-19. Examples of Crosswalk Markings



Support:

10 Chapter 4F contains information on Pedestrian Hybrid Beacons. Section 4L.03 contains information regarding Warning Beacons to provide active warning of a pedestrian's presence. Section 4N.02 contains information regarding In-Roadway Warning Lights at crosswalks. Chapter 7D contains information regarding school crossing supervision.

Guidance:

11 *Because non-intersection pedestrian crossings are generally unexpected by the road user, warning signs (see Section 2C.50) should be installed for all marked crosswalks at non-intersection locations and adequate visibility should be provided by parking prohibitions.*

Support:

12 Section 3B.16 contains information regarding placement of stop line markings near crosswalk markings.

Option:

13 For added visibility, the area of the crosswalk may be marked with white diagonal lines at a 45-degree angle to the line of the crosswalk or with white longitudinal lines parallel to traffic flow as shown in Figure 3B-19.

14 When diagonal or longitudinal lines are used to mark a crosswalk, the transverse crosswalk lines may be omitted. This type of marking may be used at locations where substantial numbers of pedestrians cross without any other traffic control device, at locations where physical conditions are such that added visibility of the crosswalk is desired, or at places where a pedestrian crosswalk might not be expected.

Guidance:

15 *If used, the diagonal or longitudinal lines should be 12 to 24 inches wide and separated by gaps of 12 to 60 inches. The design of the lines and gaps should avoid the wheel paths if possible, and the gap between the lines should not exceed 2.5 times the width of the diagonal or longitudinal lines.*

Option:

16 When an exclusive pedestrian phase that permits diagonal crossing of an intersection is provided at a traffic control signal, a marking as shown in Figure 3B-20 may be used for the crosswalk.

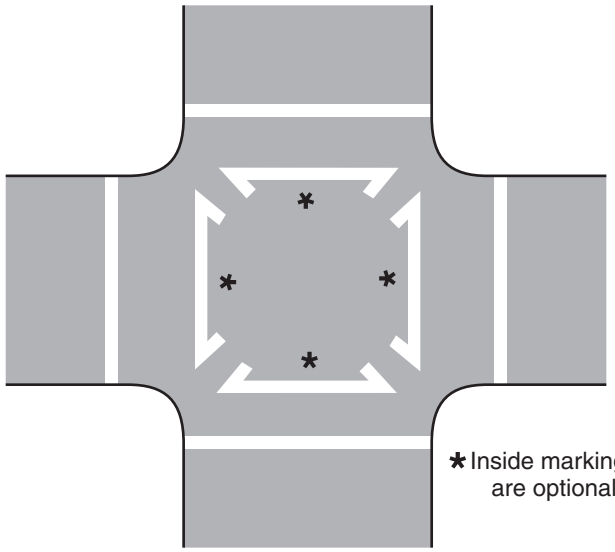
Guidance:

17 *Crosswalk markings should be located so that the curb ramps are within the extension of the crosswalk markings.*

Support:

18 Detectable warning surfaces mark boundaries between pedestrian and vehicular ways where there is no raised curb. Detectable warning surfaces are required by 49 CFR, Part 37 and by the Americans with Disabilities Act (ADA) where curb ramps are constructed at the junction of sidewalks and the roadway, for marked and unmarked crosswalks. Detectable warning surfaces contrast visually with adjacent walking surfaces, either light-on-dark, or dark-on-light. The "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)" (see Section 1A.11) contains specifications for design and placement of detectable warning surfaces.

Figure 3B-20. Example of Crosswalk Markings for an Exclusive Pedestrian Phase that Permits Diagonal Crossing



Section 3B.19 Parking Space Markings

Support:

01 Marking of parking space boundaries encourages more orderly and efficient use of parking spaces where parking turnover is substantial. Parking space markings tend to prevent encroachment into fire hydrant zones, bus stops, loading zones, approaches to intersections, curb ramps, and clearance spaces for islands and other zones where parking is restricted. Examples of parking space markings are shown in Figure 3B-21.

Standard:

02 **Parking space markings shall be white.**